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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 1

Application Number 09/941,453

Filing Date 08/28/2001

First Named Inventor: Fang-Cheng Chang

Examiner name: J. Mancuso

GROUP: 2623 1756

Mohamedulla

Attorney Docket Number NTI-024

Technology Center 2600

U.S. PUBLISHED APPLICATION DOCUMENTS

Examiner Initials*	Cited No. ¹	U.S. Patent Document Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Info. Appear
SRM	A01	2001/0004122	A1	Ito	06/21/2001	
SRM	A02	2001/0005619	A1	Hasebe et al.	06/28/2001	

U.S. PATENT DOCUMENTS

Examiner Initials*	Cited No. ¹	U.S. Patent Document Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Info. Appear
SRM	B01	5597668		Nowak et al.	01/28/1997	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cited No. ¹	Foreign Patent Document Office ³ Number ⁴	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Info. Appear	T ⁶

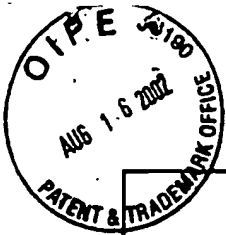
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER Mohamedulla

DATE CONSIDERED 3/21/05

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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

SHEET 1 of 2**INFORMATION DISCLOSURE
CITATION****PTO-1449****Atty. Docket No.**

NTI-024

Serial No.

09/941,453-6364

Applicant

CHANG, Fang-Cheng

Filing Date

8/28/2001

Group1756
~~Not Yet Assigned~~**U.S. PATENT DOCUMENTS**

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<i>SRM</i>	6,016,357	1/18/2000	Neary, et al.	382	144	6/16/1997
<i>SRM</i>	6,023,328	2/8/2000	Pierrat	356	237.4	2/23/1998
<i>SRM</i>	6,076,465	6/20/2000	Vacca, et al.	101	481	9/19/1997
<i>SRM</i>	6,091,845	7/18/2000	Pierrat, et al.	382	144	2/24/1998
<i>SRM</i>	6,272,236	8/7/2001	Pierrat, et al.	382	144	7/18/2000
<i>SRM</i>	6,334,209 B1	12/25/2001	Hashimoto, et al.	716	21	9/2/1999
<i>SRM</i>	2002/0019729 A1	2/14/2002	Chang, et al.	703	6	8/7/1998

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SHEET 2 of 3INFORMATION DISCLOSURE
CITATION

PTO-1449

Atty. Docket No.

NTI-024

Serial No.

09/941,453-6364

Applicant

CHANG, Fang-Cheng

Filing Date

8/28/2001

Group

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FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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<i>SM</i>	WO 97/13370	4/10/1997	WO	—	—	<input type="checkbox"/>	<input type="checkbox"/>
<i>SM</i>	WO 98/20327	5/14/1998	WO	—	—	<input type="checkbox"/>	<input type="checkbox"/>
<i>SM</i>	WO 98/45685	10/15/1998	WO	—	—	<input type="checkbox"/>	<input type="checkbox"/>
<i>SM</i>	WO 99/38002	7/29/1999	WO	—	—	<input type="checkbox"/>	<input type="checkbox"/>
<i>SM</i>	WO 99/56113	11/4/1999	WO	—	—	<input type="checkbox"/>	<input type="checkbox"/>
<i>SM</i>	WO 99/59200	11/18/1999	WO	—	—	<input type="checkbox"/>	<input type="checkbox"/>
<i>SM</i>	WO 99/67626	12/29/1999	WO	—	—	<input type="checkbox"/>	<input type="checkbox"/>
<i>SM</i>	WO 99/14706 A2/A3	3/25/1999	WO	—	—	<input type="checkbox"/>	<input type="checkbox"/>

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SHEET 3 of 3INFORMATION DISCLOSURE
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PTO-1449

Atty. Docket No.

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EXAMINER'S INITIALS	CITATION
	Spence, C., et al., "Detection of 60(degree) Phase Defects on Alternating PSMs", Advanced Micro Devices, KLA-Tencor, DuPont RTC (2 pages).
	Ogawa, K., et al., "Phase Defect Inspection by Differential Interference", Lasertec Corporation (12 pages).
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	Fiekowsky, P., "The End of Thresholds: Subwavelength Optical Linewidth Measurement Using the Flux-Area Technique", Automated Visual Inspection (6 pages).
SM	Watanabe, H., et al., "Detection and Printability of Shifter Defects in Phase-Shifting Masks", Japanese Journal of Applied Physics, Vol. 30, No. 11B, pp. 3016-3020, November 1991.
SM	Hosono, K., et al., "A Novel Architecture for High Speed Dual Image Generation of Pattern Data for Phase Shifting Reticle Inspection", SPIE - Integrated Circuit Metrology, Inspection, and Process Control VI, Vol. 1673, pp. 229-235 (1992).
SM	Ohtsuka, H., et al., "Evaluation of Repair Phase and Size Tolerance for a Phase-Shift Mask", J. Vac. Sci. Technol. B, Vol. 11, No. 6, pp. 2665-2668, November/December 1993.
SM	Reynolds, J., "Elusive Mask Defects: Reflectivity Variations", Solid State Technology, pp. 75-76, March 1995.
SM	Kusunose, H., et al., "Direct Phase-Shift Measurement with Transmitted Deep-UV Illumination", SPIE, Vol. 2793, pp. 251-260 (1996).
SM	Fiekowsky, P., et al., "Defect Printability Measurement on the KLA-351: Correlation to Defect Sizing Using the AVI Metrology System", SPIE 19th Annual BACUS Symposium on Photomask Technology and Management Conference, pp. 1-6, September 1999.
SM	Tejnil, E., et al., "Option for At-Wavelength Inspection of Patterned Extreme Ultraviolet Lithography Masks", SPIE Bacus '99, pp. 1-12 (1999).
SM	Hemar, S., et al., "Finding Killer CD Variations by Full-Reticle CD Mapping", Microlithography World, pp. 4, 6, 8 & 10 (Summer 2000).

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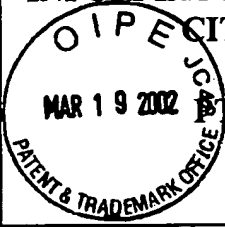
INFORMATION DISCLOSURE CITATION 	Atty. Docket No. NTI-024	Serial No. 09/941,453-6364
	Applicant CHANG, Fang-Cheng	
	Filing Date 8/28/2001	Group 1756 Not Yet Assigned
	Technology Center 2600 MAR 21 2002 RECEIVED	

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
SRM	5,326,659	7/5/1994	Liu, et al.	430	5	3/5/1992
↑	5,340,700	8/23/1994	Chen, et al.	430	312	11/3/1993
↑	5,432,714	7/11/1995	Chung, et al.	364	525	9/2/1994
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↑	5,795,688	8/18/1998	Burdorf, et al.	430	30	8/14/1996
↑	5,801,954	9/1/1998	Le, et al.	364	488	4/24/1996
↑	5,804,340	9/8/1998	Garza, et al.	430	5	12/23/1996
↑	5,815,685	9/29/1998	Kamon	395	500	9/15/1995
↑	5,825,647	10/20/1998	Tsudaka	364	167.03	3/12/1996
↑	5,849,440	12/15/1998	Lucase, et al.	430	5	1/29/1997
↑	5,862,058	1/19/1999	Samuels, et al.	364	491	5/16/1996
↑	5,900,338	5/4/1999	Garza, et al.	430	5	8/15/1997
↑	6,009,250	12/28/1999	Ho, et al.	395	500.06	9/30/1997
↑	6,009,251	12/28/1999	Ho, et al.	395	500.06	9/30/1997
↑	6,011,911	1/4/2000	Ho, et al.	395	500.06	9/30/1997
↑	6,078,738	6/20/2000	Garza, et al.	395	500.22	5/8/1997
↓	6,081,659	6/27/2000	Garza, et al.	395	500.22	4/26/1999
SRM	6,171,731 B1	1/9/2001	Medvedeva, et al.	430	5	1/20/1999


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INFORMATION DISCLOSURE CITATION  PTO-1449		Atty. Docket No. NTI-024		Serial No. 09/941,453-6344			
		Applicant CHANG, Fang-Cheng		Group 1756 Not Yet Assigned			
		Filing Date 8/28/2001		Technology Center 2600 MAR 21 2002 RECEIVED			
FOREIGN PATENT DOCUMENTS							
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
SRM	WO 00/36525 A2	6/22/2000	WO	/	/	<input type="checkbox"/>	<input type="checkbox"/>
SRM	WO 00/67074 A1	11/9/2000	WO	/	/	<input type="checkbox"/>	<input type="checkbox"/>
SRM	WO 00/67075 A1	11/9/2000	WO	/	/	<input type="checkbox"/>	<input type="checkbox"/>
SRM	WO 00/67076 A1	11/9/2000	WO	/	/	<input type="checkbox"/>	<input type="checkbox"/>


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INFORMATION DISCLOSURE CITATION 		Atty. Docket No. NTI-024 Applicant CHANG, Fang-Cheng Filing Date 8/28/2001	Serial No. 09/941,453-6364 Group 1786 Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
EXAMINER'S INITIALS	CITATION		
	Cobb, et al., "Fast Sparse Aerial Image Calculation for OPC", SPIE, Vol. 2621, pp. 534-544.		
	Stirniman, J., et al., "Spatial Filter Models to Describe IC Lithographic Behavior", Precim Corporation, Portland, Oregon (10 pages).		
	Sugawara, M., et al., "Defect Printability Study of Attenuated Phase-Shifting Masks for Specifying Inspection Sensitivity", Sony Corporation, Kanagawa, Japan (16 pages).		
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	Gordon, R., et al., "Mask Topography Simulation for EUV Lithography", FINLE Technologies Inc. (15 pages).		
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	Wong, A., et al., "Polarization Effects in Mask Transmission", University of California Berkeley (8 pages).		
	Neureuther, A., et al., "Modeling Defect-Feature Interactions in the Presence of Aberrations", University of California Berkeley (10 pages).		
SPM	Casey, Jr., J.D., et al., "Chemically Enhanced FIB Repair of Opaque Defects on Molybdenum Silicide Photomasks", SPIE, Vol. 3236, pp. 487-497 (1997).		
SPM	Mathur, B.P., et al., "Quantitative Evaluation of Shape of Image on Photoresist of Square Apertures", IEEE, Transactions On Electron Devices, Vol. 35, No. 3, pp. 294-297, March 1988.		
SPM	Neureuther, A., "Modeling Phase Shifting Masks", SPIE, 10th Annual Symposium On Microlithography, Vol. 1496, pp. 80-85 (1990).		
SPM	Henke, W., et al., "A Study of Reticle Defects Imaged Into Three-Dimensional Developed Profiles of Positive Photoresist Using the Solid Lithography Simulator", Microelectronics Eng., Vol. 14, pp. 283-297 (1991).		
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INFORMATION DISCLOSURE 		Atty. Docket No. NTI-024 Applicant CHANG, Fang-Cheng Filing Date 8/28/2001	Serial No. 09/941,453-6364 Group 1752 Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
EXAMINER'S INITIALS	CITATION		
SM	Ham, Y.M., et al., "Dependence of Defects in Optical Lithography", Jpn. J. Appl. Phys., Vol. 31, pp. 4137-4142 (1992).		
SPM	Ohtsuka, H., et al., "Phase Defect Repair Method for Alternating Phase Shift Masks Conjugate Twin-Shifter Method", Jpn. J. Appl. Phys., Vol. 31, pp. 4143-4149 (1992).		
SK	Watanabe, H., et al., "Detection and Printability of Shifter Defects in Phase-Shifting Masks II Defocus Characteristics", Jpn. J. Appl. Phys., Vol. 31, pp. 4155-4160 (1992).		
SPM	Crisalle, O., et al., "A Comparison of the Optical Projection Lithography Simulators in SAMPLE and PROLITH", IEEE, Transactions On Semiconductor Manufacturing, Vol. 5, No. 1, pp. 14-26, February 1992.		
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SM	Pati, Y.C., et al., "Phase-Shifting Masks for Microlithography: Automated Design and Mask Requirements", J. Opt. Soc. Am., Vol. 11, No. 9, pp. 2438-2452, September 1994.		
SK	Spence, C., et al., "Automated Determination of CAD Layout Failures Through Focus: Experiment and Simulation", SPIE, Vol. 2197, pp. 302-313 (1994).		
SK	Qian, Q.D., et al., "A New Scalar Planewave Model for High NA Lithography Simulations", IEEE, pp. 45-48 (1994).		
SK	Karklin, L., "A Comprehensive Simulation Study of the Photomask Defects Printability", SPIE, Vol. 2621, pp. 490-504 (1995).		
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SPM	Brunner, T., et al., "Approximate Models for Resist Processing Effects", SPIE, Vol. 2726, pp. 198-207, March 1996.		

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INFORMATION DISCLOSURE CITATION  ETO-1449		Atty. Docket No. NTI-024 Applicant CHANG, Fang-Cheng Filing Date 8/28/2001	Serial No. 09/941,453-6364 Group 1756 Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
EXAMINER'S INITIALS	CITATION		
<i>gr</i>	Chang, K., et al., "Accurate Modeling of Deep Submicron Interconnect Technology", TMA Times, Vol. IX, No. 3 (1997).		
<i>sm</i>	Gans, F., et al., "Printability and Repair Techniques for DUV Photomasks", SPIE, Proceedings Of The 17th Annual Symposium On Photomask Technology And Management, Vol. 3236, pp. 136-141 (1997).		
<i>gr</i>	Ibsen, K., et al., "Clear Field Reticle Defect Diposition for Advanced Sub-Half Micron Lithography", SPIE, Proceedings Of The 17th Annual Symposium On Photomask Technology And Management, Vol. 3236, pp. 124-135 (1997).		
<i>gr</i>	Pati, Y.C., et al., "Exploiting Structure in Fast Aerial Image Computation for Integrated Circuit Patterns", IEEE Transactions On Semiconductor Manufacturing, Vol. 10, No. 1, pp. 62-74, February 1997.		
<i>gr</i>	Vacca, A., et al., "100nm Defect Detection Using a Dynamically Programmable Image Processing Algorithm", SPIE, Vol. 3236 (1997) (Abstract Only).		
<i>gr</i>	Kubota, H., et al., "A Fast Method of Simulating Resist Pattern Contours Based on Mean Inhibitor Concentration", Jpn. J. Appl. Phys., Vol. 37, pp. 5815-5820 (1998).		
<i>gr</i>	Vacca, A., et al., "100nm Defect Detection Using an Existing Image Acquisition System", SPIE, Vol. 3236, pp. 208-21 (1998).		
<i>gr</i>	Fukuda, H., et al., "Determination of High-Order Lens Aberration Using Phase/Amplitude Linear Algebra", J. Vac. Sci. Technol. B, Vol. 17, No. 6, pp. 3318-3321, November/December 1999.		
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<i>SRM</i>	Balasinski, A., et al., "A Novel Approach to Simulate the Effect of Optical Proximity on MOSFET Parametric Yield", IEEE, pp. 37.6.1-37.6.4 (1999).		
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SHEET 1 of 3

INFORMATION DISCLOSURE CITATION PTO-1449	Atty. Docket No. NTI-024	Serial No. 09/941,453
	Applicant CHANG, Fang-Cheng	
	Filing Date 8/28/2001	Group 1702 2623

U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
SKM	6,130,750	10/10/2000	Ausschnitt, et al.	356	401	8/28/1997
SKM	6,346,426 B1	2/12/2002	Toprac, et al.	438	8	11/17/2000

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SHEET 2 of 3INFORMATION DISCLOSURE
CITATION

PTO-1449

Atty. Docket No.

NTI-024

Serial No.

09/941,453

Applicant

CHANG, Fang-Cheng

Filing Date

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U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
SRM	2002/0164064 A1	11/7/2002	Karklin, et al.	382	145	3/20/2001
SMR	2002/0164065 A1	11/7/2002	Cai, et al.	382	149	3/20/2001

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SHEET 3 of 3

INFORMATION DISCLOSURE CITATION PTO-1449		Atty. Docket No. NTI-024	Serial No. 09/941,453
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EXAMINER'S INITIALS	CITATION		
<i>SM</i>	Lin, B.J., et al., "Single-Level Electric Testsites for Phase-Shifting Masks", SPIE, Vol. 1673, pp. 221-228, March 9-11, 1992.		

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